

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/981,840	10/17/2001	Phillip W. Barth	10003813-1	8468	
75	90 02/07/2006	EXAMINER			
AGILENT TECHNOLOGIES, INC.			NORRIS, JEREMY C		
Legal Departme		ART UNIT	DARED NUMBER		
Intellectual Property Administration			ARTUNII	PAPER NUMBER	
P.O. Box 7599		2841			
Loveland, CO 80537-0599			DATE MAILED: 02/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	О.	Applicant(s)				
Office Action Summary		09/981,840		BARTH ET AL.	m			
		Examiner		Art Unit				
		Jeremy C. Nor	ris	2841				
The Period for Re	MAILING DATE of this communicationly	ion appears on the cov	er sheet with the c	orrespondence addr	'ess			
WHICHEV - Extensions of after SIX (6) - If NO period - Failure to reposition of the control of t	ENED STATUTORY PERIOD FOR ER IS LONGER, FROM THE MAIL! of time may be available under the provisions of 37 MONTHS from the mailing date of this communication for reply is specified above, the maximum statutory oly within the set or extended period for reply will, be served by the Office later than three months after that term adjustment. See 37 CFR 1.704(b).	ING DATE OF THIS (CFR 1.136(a). In no event, ho ation. by period will apply and will expi by statute, cause the applicatio	COMMUNICATION owever, may a reply be tim re SIX (6) MONTHS from to n to become ABANDONED	l. ely filed the mailing date of this comi D (35 U.S.C. § 133).	,			
Status								
1)⊠ Resr	onsive to communication(s) filed or	n 14 November 2005						
		This action is non-f	inal					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the								
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
		madi Expanto quayio	, .000 0.5. 11, 40	0.0.2.0.				
Disposition of	Claims							
4)⊠ Clain	4)⊠ Claim(s) <u>1-30 and 37-39</u> is/are pending in the application.							
4a) C	4a) Of the above claim(s) 4-7 and 19-21 is/are withdrawn from consideration.							
5)⊠ Clain	Claim(s) <u>37-39</u> is/are allowed.							
6)⊠ Clain	Claim(s) <u>1,2,8-17 and 22-30</u> is/are rejected.							
7)⊠ Clain)⊠ Claim(s) <u>3 and 18</u> is/are objected to.							
8)∭ Clain	n(s) are subject to restriction	and/or election requi	rement.					
Application Pa	apers							
9)∐ The s	pecification is objected to by the Ex	aminer.						
	rawing(s) filed on 17 October 2001		d or b) objected	to by the Examiner	•			
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	acement drawing sheet(s) including the			, i	t 1.121(d).			
_	eath or declaration is objected to by				` '			
Priority under	35 U.S.C. § 119							
12)∏ Ackno	owledgment is made of a claim for f	oreian priority under 3	35 U.S.C. & 119(a).	-(d) or (f)				
	b)☐ Some * c)☐ None of:		70 0.0.0. g 7 70(a)	(4) 61 (1).				
1.	Certified copies of the priority docu	uments have been re	ceived.					
2.	Certified copies of the priority doci			n No.				
3.	Copies of the certified copies of th				age			
_	application from the International B				.ago			
* See th	e attached detailed Office action for	· ·	` ''	d.				
Attachment(s)	forence Cited (DTO 000)	୮	7	DTO 446				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
3) 🔲 Information (Disclosure Statement(s) (PTO-1449 or PTO/Mail Date	(SB/08) 5)		atent Application (PTO-1	52)			
Patent and Trademark				<u> </u>				

Application/Control Number: 09/981,840

Art Unit: 2841

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 13-17, 22, and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,297,967 (Baumberger).

Baunberger discloses, referring primarily to figures 5 & 6, a flexible circuit comprising; a substrate (55) having a topside and plane; a flexible and extensible structure (61) formed within said substrate and co-planar with said substrate, said substrate having a structure topside; and wherein said structure is extendable out of said plane by a distance greater than a maximum lateral dimension of said structure (col. 6, lines 5-15 and col. 7, lines 40-45, such that said structure topside continues to face in a general topside direction (figure 6) [claim 1], further comprising an insulated pathway formed on said structure (61, is insulated from the elements by a nickel gold layer col. 7, lines 50-65) [claims 2, 17], wherein said structure is a spiral (figure 5) [claims 8, 22], wherein said structure has geometric features selected from a group comprising spiral, bend, curve, twist, turn, curl, loop, u-turn and zigzag (see figure 12) [claims 13, 27], wherein said structure is defined by dashed perforations (col. 6, lines 1-15) [claims 14, 28], wherein said structure comprises a boss for receiving a force to extend said structure out of said plane (col. 7, lines 35-50) [claims 15, 29], further

comprising at least a first insulated pathway and a second insulated pathway (61, figure 6) [claims 16, 30].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 09/981,840

Art Unit: 2841

Claims 9-12 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baunberger.

Regarding claims 9-12 and 23-26, Baunberger does not specifically disclose that the spiral comprises an Archimedes spiral, a parabolic spiral, a polygonal spiral, a square spiral, a triangular spiral, a pentagonal spiral or a hexagonal spiral. However, each one of these shapes is well known and a trivial variant of the generic "spiral" disclosed by the modified invention of Baunberger. As such, one of ordinary skill in the art would be motivated to use any one of these well-known shapes as the "spiral" in the modified invention of Baunberger. The motivation for doing so would have been to use simple variants also easy to manufacture. Moreover, it has been held that more than a mere change of form is necessary for patentability. Span-Deck, Inc v. Fab-con, Inc. (CA 8, 1982) 215 USPQ 835.

Allowable Subject Matter

Claims 37-39 are allowed.

Claims 3 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 3 states the limitation "wherein said pathway is a capillary for transferring a fluid". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in nor suggested by the prior art. Claim 18 states the limitation "wherein

said insulated pathway is a capillary for transferring a fluid". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in nor suggested by the prior art. Claim 37 states the limitation "a capillary for transferring fluid on said structure". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in nor suggested by the prior art.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 8-17, and 22-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCSN

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800